

CURRENT LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1-31 (canceled).

32. (Withdrawn) A method for screening for anticancer activity in a potential drug, the method comprising:

- (a) contacting a cell that expresses a cancer associated (CA) gene comprising a nucleic acid sequence of SEQ ID NO:776 with a candidate anticancer drug; and
- (b) monitoring an effect of the candidate anticancer drug on expression of the CA gene, wherein a candidate drug that alters expression of the CA gene is identified as a drug with anticancer activity.

33. (Withdrawn) The method of screening for anticancer activity according to claim 32, wherein the CA gene encodes a nucleic acid comprising SEQ ID NO:777.

34. (Withdrawn) The method of screening for anticancer activity according to claim 32, further comprising: (c) comparing the level of expression of the CA gene in the absence of said drug candidate to the level of expression of the CA gene in the presence of the drug candidate.

Claims 35-50 (cancelled).

51. (Currently amended) A method for diagnosing cancer comprising: a) determining the expression of a gene which expresses ~~encodes~~ a nucleic acid comprising SEQ ID NO:777, in a first tissue type of a first individual; and b) comparing said expression of said gene with that from a second normal tissue type from said first individual or a second unaffected individual; wherein a difference in said expression indicates that the first individual has cancer.

Claims 52-77 (canceled)

78. (Currently amended) A method for diagnosing colon, breast or prostate cancer comprising comparing a level of myosin I mRNA comprising SEQ ID NO:777 in a patient sample

comprising colon, breast or prostate tissue to the level of the myosin I mRNA in a normal control; wherein a change of at least 50% in the level in the patient sample relative to the normal control indicates that the patient has or is predisposed to colon, breast or prostate cancer.

Claims 79-81 (Canceled).

82. (Previously presented) The method of claim 78 wherein a change of at least 100% in the level of the myosin I mRNA in the patient sample relative to the normal control indicates that the patient has or is predisposed to colon, breast or prostate cancer.

83. (Currently amended) A method for diagnosing colon, breast or prostate cancer comprising detecting evidence of differential expression of myosin I gene which expresses a nucleic acid comprising SEQ ID NO:777 in a patient sample as compared to a control, wherein the evidence of differential expression of myosin I indicates that the patient has colon, breast or prostate cancer.

84. (Currently amended) The method of claim 83 wherein the evidence of differential expression is detected by measuring the level of an expression product of myosin I.

85. (Previously presented) The method of claim 84 wherein the expression product is a protein or mRNA.

86. (Previously presented) The method of claim 85 wherein the level of expression of protein is measured using an antibody which specifically binds to a myosin I polypeptide.

87. (Previously presented) The method of claim 86 wherein the antibody is linked to an imaging agent.

Claim 88 (Canceled).

89. (Currently amended) The method of claim ~~[[88]]~~ 83 wherein the control comprises normal colon, breast or prostate tissue.

90. (Currently amended) The method of claim [[88]] 84 wherein the level of the expression product in the patient sample is changed by at least 200% relative to the control.

Claims 91-92 (Canceled).

93. (Previously presented) The method of claim 83 wherein the evidence of differential expression is detected by measuring the level of a myosin I expression product comprising SEQ ID NO: 777.

94. (Currently amended) A method of a diagnosing colon, breast or prostate cancer in a patient comprising:

(a) contacting a polynucleotide that hybridizes under highly stringent conditions of 50-60° C, 5X SSC, overnight, followed by washing twice at 65° C for 20 minute with each of 2X, 0.5X and 0.2x SSC containing 0.1% SDS, to a nucleotide sequence comprising SEQ ID NO: 777 with nucleic acids of a patient colon, breast or prostate sample under binding conditions suitable to form a duplex; and

(b) comparing the amount of the duplex formed to the amount of duplex formed when the polynucleotide is contacted with nucleic acids of a non-cancerous colon, breast or prostate control,

wherein altered levels of the amount of duplex formed upon contacting said polynucleotide with said nucleic acids of the patient sample compared to the amount of duplex formed upon contacting said polynucleotide and said nucleic acids of the non-cancerous control indicates that the patient has colon, breast or prostate cancer.

Claim 95 (Canceled)